WHAT IS CLAIMED IS:

1.   A multi-wavelength laser source (MWLS) system, comprising:

(a)   first and second monochromatic lasers having first (f_1) and second (f_2) lasing frequencies, respectively;

(b)   means for amplifying combined signals of said first and second lasers;

(c)   means for multiplying the amplified combined signals to yield comblike multi-channel WDM laser signals separated from each other by a frequency equal to the difference between f1 and f2.

2.   The system as defined in claim 1, said means for multiplying comprising a plurality of serially interconnected optical fiber sections each having predetermined propagation characteristics for said amplified combined signals.

3.   The system as defined in claim 2, said predetermined propagation characteristics being propagation mode, dispersion and length.

4.   The system as defined in claim 3, said plurality of serially interconnected fiber sections being five having lengths L_1, L_2, L_3, L_4 and L_5, respectively, L_1 being the first section, and L_5 being the last section.

5.   The system as defined in claim 4, the third fiber section being a single mode fiber (SMF) section.

6.   The system as defined in claim 5, the first, second, fourth and fight fiber section being dispersion shifted fiber (DSF) sections.

8

7. The system as described in claim 6, which $L_1 = 1.1$ km, $L_2 = 1.1$ km, $L_3 = 20$ m, $L_4 = 1$ km and $L_5 = 1$ km.

8. The system as defined in claim 7, said fine fiber section, having associated dispersion value, D_1 to D_5 as follows: $D_1 = -0.399$; $D_2 = 0.402$; $D_3 = 16$; $D_4 = 0.402$ and $D5 = -0.399$, all in units of ps/km/nm.

9. The system as described in claim 8, wherein f1 and f2 correspond to wavelengths in the vicinity of 1550 nm.

10. A method of reducing stimulated Brillouin scattering (SBS) in a system as defined in claim 2, comprising the step of modulating said first and second monochromatic lasers by a very low frequency signal.

10